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## CLAIMS

What is claimed is:

1. A business telecommunication system capable of connecting wireless mobile stations and wired stations located at a plant, the system comprising:

a base station to which said wireless mobile stations are connected, said base station being installed at said plant,

a private branch exchange to which said wired stations are connected, said private branch exchange being installed at said plant,

at least two dedicated lines, at least one line of said at least two dedicated lines connecting said base station with a public switched telephone network, another at least one line of said at least two dedicated lines connecting said public switched telephone network with said private branch exchange,

a plurality of antennas associated with said base station to connect said wireless mobile stations to said base station, and

whereby a multipath can be eliminated, and reliable communication can be attained in circumstances of shielded areas at the plant.

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2. The system as claimed in claim 1, further comprising software means for creating a unique full network number for any of said wireless mobile and wired stations, whereby a connection between said wireless mobile stations and between one of said wireless mobile station and one of said wired stations, no matter whether said wireless mobile stations are at the plant at the moment of establishing the connection, can be set up by using their abbreviated intraplant numbers.

3. The system as claimed in claim 2, wherein said software means are incorporated in said base station and said private branch exchange.

4. The system as claimed in claim 1, wherein said antennas are low power antennas.

5. The system as claimed in claim 1, wherein said at least two dedicated lines are of E1 type.

6. The system as claimed in claim 1, wherein said base station is a Global System Mobile base station.

7. The system as claimed in claim 6, wherein said base station is of Ericsson RBS 2205 type.

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8. The system as claimed in claim 1, wherein said private branch exchange is of a Siemens Hicom 300 family.

9. A telecommunication system capable of connecting wireless mobile stations and wired stations located at a semiconductor manufacturing plant under the circumstances of shielded areas of clean rooms, the system comprising:

a base station to which said wireless mobile stations are connected, said base station being installed at said plant,

a private branch exchange to which said wired stations are connected, said private branch exchange being installed at said plant,

at least two dedicated lines, at least one line of said at least two dedicated lines connecting said base station with a public switched telephone network, another at least one line of said at least two dedicated lines connecting said public switched telephone network with said private branch exchange,

a plurality of antennas associated with said base station to connect said wireless mobile stations to said base station,

software means for creating a unique full network number for any of said wireless mobile and wired stations,

whereby a multipath can be eliminated, and reliable communication can be attained in circumstances of shielded areas at the plant, and

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whereby a connection between said wireless mobile stations and between one of said wireless mobile station and one of said wired stations, no matter whether said wireless mobile stations are at the plant at the moment of establishing the connection, can be set up by using their abbreviated intraplant numbers.

10. The system as claimed in claim 9, wherein said software means are incorporated in said base station and said private branch exchange.

11. The system as claimed in claim 9, wherein said antennas are low power antennas.

12. The system as claimed in claim 9, wherein said at least two dedicated lines are of E1 type.

13. The system as claimed in claim 9, wherein said base station is a Global System Mobile base station.

14. The system as claimed in claim 13, wherein said base station is of Ericsson RBS 2205 type.

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15. The system as claimed in claim 9, wherein said private branch exchange is of a Siemens Hicom 300 family.

16. A telecommunication system capable of connecting wireless mobile stations and wired stations located at a semiconductor manufacturing plant under the circumstances of shielded areas of clean rooms, the system comprising:

a base station to which said wireless mobile stations are connected, said base station being installed at said plant,

a private branch exchange to which said wired stations are connected, said private branch exchange being installed at said plant,

at least two dedicated lines, at least one line of said at least two dedicated lines connecting said base station with a public switched telephone network, another at least one line of said at least two dedicated lines connecting said public switched telephone network with said private branch exchange,

a plurality of low power antennas associated with said base station to connect said wireless mobile stations to said base station,

software means for creating a unique full network number for any of said wireless mobile and wired stations,

whereby a multipath can be eliminated, and reliable communication can be attained in circumstances of shielded areas at the plant, and

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whereby a connection between said wireless mobile stations and between one of said wireless mobile station and one of said wired stations, no matter whether said wireless mobile stations are at the plant at the moment of establishing the connection, can be set up by using their abbreviated intraplant numbers.

17. The system as claimed in claim 16, wherein said software means are incorporated in said base station and said private branch exchange.

18. The system as claimed in claim 16, wherein said at least two dedicated lines are of E1 type.

19. The system as claimed in claim 16, wherein said base station is a Global System Mobile base station of Ericsson RBS 2205 type.

20. The system as claimed in claim 16, wherein said private branch exchange is of a Siemens Hicom 300 family.